## STATE OF NEVADA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES DIVISION OF ENVIRONMENTAL PROTECTION BUREAU OF AIR POLLUTION CONTROL

## Director's Review and Preliminary Determination of Permit Issuance for Nevada Department of Corrections – Northern Nevada Correctional Center December 21, 2005

Nevada Department of Corrections – Northern Nevada Correctional Center (NDOC-NNCC) has submitted a Class II application to the Nevada Division of Environmental Protection, Bureau of Air Pollution Control (NDEP-BAPC) requesting a new Class II Air Quality Operating Permit #AP9223-2093. The new permit is for construction and operation of one wood fired steam boiler, four (4) existing natural gas fired steam generating boilers, four (4) existing diesel fueled emergency generators, and forty-three (43) new and existing other insignificant activities. The wood fired steam boiler has a maximum heat input rate of 37.95 MMBtu/hr and can generate 1 MW (Megawatt) of electricity. The four existing natural gas fired boilers have maximum heat input rates of 6.28, 6.277, 8.369, and 12.553 MMBTU/hr. The four existing diesel fueled emergency generators have horsepower ratings of 96, 135, 805, and 1,073 HP. The insignificant activities consist of natural gas fired space heaters, natural gas fired water heaters, natural gas fired steam kettles, gasoline and diesel storage tanks, solvent tanks, cooling tower, wood fuel handling system, and ash handling system. If approved, the issuance of a new Class II permit #AP9223-2093 will allow NDOC-NNCC to construct and operate the new wood fired steam boiler and continue to operate their existing processes.

The application materials related to the new Class II operating permit was received by NDEP-BAPC on November 9, 2005. The permit application was deemed administratively complete on November 22, 2005.

NDOC-NNCC is located in southern Carson City in Carson City County, Nevada. NDOC-NNCC operations are located approximately at UTM 262.62 km East by 4,332.16 km North, Zone 11 (Section 4, Township 14 North, Range 20 East in Hydrographic Area 104). The Standard Industrial Classification (SIC) number for the facility is 9223 (Correctional Institutions).

As proposed, NDOC-NNCC will be a Class II source under the new permit. The potential-to-emit (PTE) of each regulated air pollutant is less than the 100-ton per year threshold for major source designation. In addition, the facility will emit less than 10 tpy of any single hazardous air pollutant (HAP) and less than 25 tpy of any combination of HAPs. The wood fired steam boiler will be subject to the provisions of 40 CFR Part 60 Subpart Dc.

Facility-Wide Proposed Annual Emissions		
Pollutant(s)		tons/yr
PM	Particulate Matter	10.72
$PM_{10}$	Particulate matter <10 microns in diameter	10.66
NO <sub>x</sub>	Nitrogen Oxides	<mark>87.09</mark>
CO	Carbon monoxide	<mark>96.61</mark>
SO <sub>2</sub>	Sulfur Dioxide	<mark>3.50</mark>
VOCs	Volatile Organic Compounds	<mark>6.59</mark>

The air quality analyses demonstrate that the emissions from the proposed processes will not cause or contribute to a violation of any applicable federal or state ambient air quality standard. Adverse air quality impacts are not expected. Therefore, NDEP-BAPC has made a preliminary determination to issue this new Class II Operating Permit #AP9223-2093 with appropriate conditions.

The proposed source must comply with all State and Federal air quality requirements and all conditions established within the new Class II Operating Permit #AP9223-2093.